

L12 ANSWER 20 OF 35 HCAPLUS COPYRIGHT 2002 ACS

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TI **Gas-barrier, impact-resistant ethylene-vinyl alcohol copolymer multilayer containers**

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PA Kuraray Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI <b>JP 03175032</b>	A2	19910730	JP 1989-315872	19891204
JP 2795708	B2	19980910		

AB The title containers with good flavor-retaining property, useful for packaging beverages, foods, cosmetics, etc., comprise a layer of a 60-98:2-40 blend of 20-60:40-80 (mol%) ethylene-vinyl alc. copolymer (I) and thermoplastic polyurethanes, and .gtoreq.1 layers of thermoplastic polyesters, polyamides, and/or polycarbonates located on .gtoreq.1 sides of the above layer. Thus, 80% I and 20% polyester-polyurethane (N content 2.8%) were blended and blow molded with isophthalic acid-modified PET (as inner and outer layers) to give a 190:20:90 (.mu.m) bottle with embossed surface having good appearance, gas permeability and deviation 20 and 4 cm<sup>3</sup>-20 .mu.m/m<sup>3</sup>-day-atm., and dropping resistance (from 1-m height, filled with water) >5 times, vs. with stripes, 14 and 8, and <1, resp., for a bottle without the polyurethane.

IC ICM B32B027-28

CC 38-3 (Plastics Fabrication and Uses)

ST ethylene vinyl alc copolymer container; food container polyester polyurethane; impact resistance gas barrier container

IT Polyamides, uses and miscellaneous  
Polycarbonates, uses and miscellaneous  
Polyesters, uses and miscellaneous  
RL: USES (Uses)  
(laminates with ethylene-vinyl alc. copolymer/polyurethane blends, for flavor-retaining impact-resistant multilayer containers)

IT Urethane polymers, uses and miscellaneous  
RL: USES (Uses)  
(polycaprolactam-, ethylene-vinyl alc. copolymer blends, for flavor-retaining multilayer containers)

IT Bottles  
Containers

- (gas-impermeable, multilayer, impact-resistant, ethylene-vinyl alc. copolymer/polyurethane blends for, flavor-retaining)
- IT Urethane polymers, uses and miscellaneous  
RL: USES (Uses)  
(polyester-, ethylene-vinyl alc. copolymer blends, for flavor-retaining multilayer containers)
- IT Urethane polymers, uses and miscellaneous  
RL: USES (Uses)  
(polyether-, ethylene-vinyl alc. copolymer blends, for flavor-retaining multilayer containers)
- IT 9017-34-9 24938-04-3 24993-04-2 25038-59-9, uses and miscellaneous  
RL: USES (Uses)  
(laminates with ethylene-vinyl alc. copolymer/polyurethane blends, for flavor-retaining impact-resistant multilayer containers)
- IT 25067-34-9  
RL: USES (Uses)  
(polyurethane blends, for flavor-retaining impact-resistant multilayer containers)